UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,768	03/05/2002	Shinichiro Kinoshita	1883-43	7456

23117 7590 11/19/2003

NIXON & VANDERHYE, PC
1100 N GLEBE ROAD
8TH FLOOR
ARLINGTON, VA 22201-4714

EXAMINER	
LEE, HWA C	

ART UNIT	PAPER NUMBER
2672	

DATE MAILED: 11/19/2003

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/087,768	KINOSHITA, SHINICHIRO	
	Examiner	Art Unit	
	Hwa C Lee	2672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-6 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-6 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 05 March 2002 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 3 recites the limitation "the cutting-out position of an image" on page 3, lines 18-19. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Yokonuma, U.S. Patent Publication No. 2001/0024528.

6. In reference to claim 1, Yokonuma discloses the limitations of "*an information terminal device provided with a means for cutting an image into a size corresponding to*

a predetermined data amount or any data amount optionally preset by a user when transmitting an image data over wire- or wireless-line or storing the image data on a storage medium such as memory card and a means for enlarging or contacting whole image being displayed on a display screen to a size corresponding to a predetermined data amount or any desirable data amount optionally determined by a user" in the following:

- An image compression apparatus and method, and to a carrier wave (that can be recorded, for example, on a recording medium) encoded with a computer readable control program having instructions for use by a computer to perform the image compression process...a compression level is determined for use in compressing a picture image to a predetermined target data amount by iteratively compressing a reduced version of the picture image in order to determine the compression level that is to be used to compress the picture image (paragraph [0016], lines 1-11) {interpreted to read as "*means for cutting an image into a size corresponding to predetermined data amount or any data amount optionally preset by a user when storing the image data on a storage medium such as memory card*"}.
- A picture image compression apparatus that compresses data of a picture image to a predetermined target data amount (claim 1, lines 1-3) {interpreted to read as "*means for cutting an image into a size*

corresponding to predetermined data amount or any data amount optionally preset by a user"}.

- The frame picture image that is compressed to the target data amount is read and recorded to the flash memory through the data transfer component as a compressed picture image file (paragraph [0081], lines 1-4; Fig. 2, no. 35; and Fig. 6, step S28) {interpreted to read as "*when storing the image data on a storage medium such as memory card*"}.
- The start expansion (decompression) command and the compression level information of the compressed picture image file are transferred from the CPU to the JPEG circuit (paragraph [0085], lines 1-4)...the compressed picture image is restored and displayed on the monitor (paragraph [0088], lines 1-3) {interpreted to read as "*a means for enlarging or contacting whole image being displayed on a display screen to a size corresponding to a predetermined data amount or any desirable data amount optionally determined by a user*"}.
- The picture image creation means creates a thumbnail picture image as the reduced-size picture image...a plurality of the thumbnail picture images are capable of being displayed in a single-view display (claims 4-5) {interpreted to read as "*a means for enlarging or contacting whole image being displayed on a display screen to a size corresponding to a predetermined data amount or any desirable data amount optionally determined by a user*"}

7. In reference to claim 2, Yokonuma discloses the limitations of "*a means for dividing an image into portions each corresponding to the predetermined data amount or the data amount optionally preset by a user and transmitting the divided image on a portion-by-portion basis and a means for receiving the portions of image data and restoring an original image from the received image data*" in the following:

- A preliminary compression target data amount and a preliminary compression initiation command are transferred from CPU to the JPEG circuit...JPEG circuit reads the data amount of the field picture image that is stored in the picture image processing memory and compresses such data amount so that it matches the preliminary compression target data amount (paragraph [0074], lines 1-10). {JPEG circuit is the hardware or the "*means*" for dividing an image. JPEG is the image compression standard that divides an image into equally sized 8 x 8 pixel blocks and then calculates the discrete cosine transform (DCT) of each block. A quantizer rounds off the DCT coefficients according to the quantization matrix and allows for large compression ratios. JPEG's compression technique uses a variable length code on these coefficients, and then writes the compressed data stream to an output file (*.jpg). For decompression, JPEG recovers the quantized DCT coefficients from the compressed data stream, takes the inverse transforms and displays the image. Also, JPEG by definition is the standard image compression method for storage and transmission purposes.}

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokonuma in view of Cohen, U.S. Patent No. 6,337,925.

11. In reference to claim 3, Yokonuma discloses all limitation of claim 1 as described in paragraph 5 above but does not explicitly disclose the limitations of "*a means for changing the cutting-out position of an image to any desirable position thereon*". Cohen discloses the said limitation in the following:

- A border is identified in a digital image defined by a plurality of pixels...User inputs are received that include an area of interest that includes at least a portion of the border to be identified (col. 4, lines 34-39). {According to Cohen, the said border is the boundary that

encompasses the portion of the picture to be cutout. The border shape and size changes according to the user input. Cohen is describing the well-known, standard tool named "magic lasso" found in image processing software, Adobe© Photoshop.}

- Identification of the border is complete when a direct input is received from the user (col. 10, lines 8-9). {Same interpretation as above.}

12. It would have been obvious to someone of ordinary skill in the art to take the teachings of Yokonuma and modify it according to Cohen to add the method of changing the location of the cropped area in order to control the location of the cutout image as desired because this allows the user to control the size of the image and the amount of data to be compressed or processed.

13. In reference to claim 4, Yokonuma discloses all limitations of claim 1 as described in paragraph 5 above but does not explicitly disclose the limitation of "*a means for changing the cutting-out shape of an image to any desired shape within the predetermined data amount or the data amount preset by a user and a means for selecting which conditions of changing the cutout shape of an image not to exceed or to exceed the predetermined data amount or the data amount preset by a user*". Cohen et al. disclose the said limitations in the following:

- A border is identified in a digital image defined by a plurality of pixels...identification of the border includes estimating information about an edge zone that models the border portion including estimating a position and width of the edge zone...the border zone is identified based

on the estimated edge zone information (col. 4, lines 34-49) {this describes the well-know function, 'lasso tool' found in several commercially available image editing software and enables the user to 'crop' an image using a movable border of any shape and size}.

- The techniques and methods permit the user to trace along a border that defines the object and then select the object to be masked and/or extracted (col. 21, lines 57-60) {interpreted to read as "*a means for changing the cutting-out shape of an image to any desired shape*"}.

14. It would have been obvious to someone of ordinary skill in the art to take the teachings of Yokonuma and to incorporate the 'lasso tool' of cohen in order to cutout a portion of any size and shape from the original image. This allows the user to accurately 'crop' only the desired portion of the original image and to control the size of the cutout portion to any predetermined data size.

15. In reference to claim 5, Yokonuma discloses all limitations of claim 1 as described in paragraph 5 above, and Yokonuma in view of Cohen discloses all limitations of claims 3-4 as described in paragraphs 10-13 above. In addition, Yokonuma discloses the limitation of "*a means for enlarging or contracting or compressing the cut out image having a different data size so as to match the predetermined data amount or the data amount optionally preset by a user*" in the following:

- The start expansion (decompression) command and the compression level information of the compressed picture image file are transferred from

the CPU to the JPEG circuit (paragraph [0085], lines 1-4)...the compressed picture image is restored and displayed on the monitor (paragraph [0088], lines 1-3) {'decompressed' and 'restored' describes

- enlarging an image data from compressed state back to the predetermined data size}.
- The picture image creation means creates a thumbnail picture image as the reduced-size picture image...a plurality of the thumbnail picture images are capable of being displayed in a single-view display (claims 4-5) {'the reduced-size picture image' is interpreted to read as "*a means for enlarging or contracting or compressing*"}.

16. In reference claim 6, Yokonuma discloses all limitations of claim 1 as described in paragraph 5 above but does not explicitly disclose the limitation of "*a means for informing a user that a data amount of an image to be cut out is different from the predetermined data amount or the data amount optionally preset by the user*". Cohen et al. discloses the said limitations in the following:

- The user may receive feedback about the measure of confidence in the edge zone model by, for example, changing the color of the highlight that indicates the determined edge zone model or the brush (col. 22, lines 56-59) {'the edge zone model' is interpreted to describe the data size of the "*cutting-out shape*" and 'the measure of confidence' is interpreted to determines the correct data size of the "*cutting out shape*"}.

- Automatically indicating to the user the calculated measure of confidence (col. 26, lines 28-30) {similar reasoning as the previous bullet}.

17. It would have been obvious to someone of ordinary skill in the art to take the teachings of Yokonuma and to add Cohen's means for informing the user if the cut out image data size differs from a predetermined data size. This combination gains the advantage of determining the accuracy of 'image cropping' and to ensure that the data size of the 'cropped image' is within the desired data size for the particular device or apparatus.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following prior art discloses the limitation of 'cropping' an image.

U.S. Patent No.	Inventor(s)
6,201,548	Cariffe, Alan E. et al.

The following prior art discloses the limitation of merging images.

U.S. Patent No.	Inventor(s)
6,563,960	Chan, San San et al.

The following prior arts disclose the limitation of image data compression.

U.S. Patent No.	Inventor(s)
6,577,769	Kenyon, Jeremy A. et al.
6,611,626	de Wneiroz, Richardo

U.S. Patent Publication No.	Inventor(s)
2002/0102028	Keller, Scott et al.
2001/0002937	Warner,. Scott J. et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hwa C Lee whose telephone number is 703-305-8987. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Mancuso can be reached on 703-305-3885. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-9700.

Hwa C Lee
Examiner
Art Unit 2672

HCL

JOSEPH MANCUSO
PRIMARY EXAMINER